## ON A NEW PHLOEOTHRIPS (THYSANOPTERA) FROM NORFOLK ISLAND.

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Fig. 17.

WHEN at Norfolk Island in 1915, Mr. A. M. Lea, Entomologist, of the South Australian Museum, collected some Thysanoptera, which were later sent to Dr. Bergroth, who is describing one of the species under the name *Phlocothrips* sungninolentus. Two tubuliferous specimens, also collected by Mr. Lea, were sent to me by Dr. Bergroth, and these likewise prove to be new. They may be known as:

## PHLOEOTHRIPS LEAI sp. nov.

General colour blackish-brown, tube slightly paler distally. Fore tibiae dark yellow, infuscated in the middle part, especially along margins; middle and hind ones blackish-brown, broadly yellow at base, narrowly yellow at apex. All tarsi yellow. Antennae as dark as hody; second joint slightly paler distally, third yellow in basal half, fourth in basal third, fifth at extreme base (pedicel).

Head somewhat longer than wide. Cheeks strongly protruding near the hind margin of eyes, thence almost straight, converging backwards and densely set with small granules, the larger of which bear short bristle-spines, the hindermost of which are longer and stronger than the others. Postocular bristles shorter than their distance from the cheeks, strongly dilated at apex. Ocelli arranged in an equilateral triangle. Eyes moderately large, not prominent, produced further backwards on dorsal than on ventral surface. Forehead slightly produced in front of the eyes.

Antennae short and thick, not quite twice as long as head. Middle joints clavate, eighth conical, broadly united with seventh; seventh and eighth together fusiform. Sense-area of second joint placed beyond the middle. Sense-cones on joints three and four thick, moderately short, those on fifth and sixth longer and more slender. Formula: 111, 1-2; IV, 2-2; V, 1-1; V1, 1-1; V11 with one on dorsum near apex,

Month cone long, acutely pointed, reaching across prosternum. Maxillary palpi slender, moderately long, basal joint not longer than wide, apical joint about seven times as long as wide, set with some stiff sense-bristles near apex. Labial palpi slightly longer than maxillary palpi, with basal joint twice as long

as wide, and one-half as long as apical joint, the apex of which is set with stiff bristles.

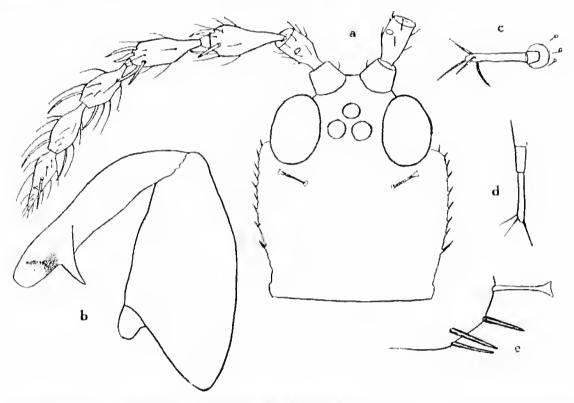


Fig. 17. Phlocothrips hai—a, head; h, fore leg; e, maxillary pulpus; d, labial pulpus; e, bristles on fore coxa, e, d, e more cularged than a and b.

Prothorax moderately large, shorter than head, across fore coxae nearly twice as wide as long. Owing to the dark colour of prothorax, antero- and postero-marginal bristles are not visible. All other bristles well developed, strongly dilated at apex; anterolaterals about twice as long as the postoculars, mediolaterals somewhat shorter, posterolaterals somewhat longer, about half as long as prothorax. Near the anterolaterals, there is a very short, forwardly directed, pointed bristle at each anterior angle.

Fore coxac, near the hind angle of femur, with a short, hyaline bristle, which is strongly dilated at apex, and is about as long as the postoculars. Behind it there are three shorter, thick, dark, pointed bristles. Fore femora incrassate, about twice as long as wide, without teeth. Fore tibiae thick, slightly swollen in the middle, not toothed. Fore tarsi with a strong, slightly curved tooth.

Pterothorax slightly wider than long, constricted at hind margin of meso thorax; metathorax dilated backwards. Wings very slightly constricted in the middle, almost parallel-sided, reaching to about the sixth or seventh abdominal segment, not densely fringed, slightly infumate, hind wings especially so along median vein. Eight to twelve interlocated ciliae,

Abdomen about as wide as pterothorax, about two and one-half times as long as wide. Segments, near each hind angle, with two hyaline, distally dilated bristles, and with one shorter, darker, pointed bristle; the dilated bristles on segments seven and eight are about as long as the segments themselves, on the preceding segments shorter (most of them broken off in the two specimens before me); ninth segment near each hind angle with about four pointed bristles (none dilated), the longest of which is hardly more than half as long as tube. Wing-retaining spines well developed on segments two to seven, S-curved; fore pair weak, shorter than the hind pair; hind ones on middle segments about as long as the distance of their tips, or even a little longer, on segments two and seven shorter. Tube two and one-half times as long as wide at base, at apex slightly more than half as wide as at base; sides straight, converging distally. Terminal bristles hair-like in distal half; the longer ones about two-thirds the length of tube, and three times as long as the shorter ones.

Measurements. Antenna, total length, 0.45 mm.; I joint, 0.05 x 0.045 mm.; II joint, 0.06 x 0.03 mm.; III joint, 0.08 x 0.04 mm.; IV joint, 0.08 x 0.04 mm.; V joint, 0.065 x 0.03 mm.; VI joint, 0.055 x 0.03 mm.; VII joint, 0.045 x 0.027 mm.; VIII joint, 0.023 x 0.013 mm. Head, 0.27 x 0.23 mm. Prothorax, 0.21 x 0.37 mm. (across fore coxae). Fore femora, 0.27 x 0.13 mm.; fore tibiae (incl. tarsi), 0.23 x 0.05 mm. Pterothorax, 0.33 x 0.36 mm. Middle femora, 0.17 x 0.06 mm.; middle tibiae (incl. tarsi), 0.23 x 0.05 mm. Hind femora, 0.24 x 0.075 mm.; hind tibiae (incl. tarsi), 0.33 x 0.05 mm. Length of wings (without fringe), 1.0 mm. Abdomen (incl. tube), 1.0 x 0.37 mm. Length of tube, 0.18 mm.; width at base, 0.07 mm.; width, 0.04 mm. Total length, 1.8 to 1.9 mm.

I have pleasure in naming this species—the first Thysanopteron known from Norfolk Island—in honour of its collector, Mr. A. M. Lea.

This species belongs to the *annulipes* group in Priesner's key (1), and is between *salicinus* and *parvus*, but differs from the others of the group (all European) especially by the shape of the head and antennae and by the stronger fore femora.

Norfolk Island (A. M. Lea): 1 type ( $\mathfrak{P}$ ) and 1 cotype (perhaps  $\mathfrak{F}$ ). The specimens were carded when I got them, and are now in balsam slides.

<sup>(1)</sup> Priesner, Tijdschr. v. Entom., lxvi, 1923, pp. 96-103.